

## MISCELLANEOUS.

*Some Notes on Acclimatized Animals.*

By Dr. J. E. GRAY, F.R.S. &amp;c.

ON my making some observations on the desirableness of obtaining information with respect to the acclimatization of domestic animals in different parts of the world, and especially in our distant colonies, at the British Association Meeting at Cambridge, last year, the Committee of the Natural-History Section recommended, and the General Committee adopted the proposition, that a Committee should be formed, consisting of Dr. Sclater, Mr. Alfred Newton, Mr. Wallace, and myself, to report on the acclimatization of Domestic Quadrupeds and Birds, and how they are affected by migration.

The following circular has been prepared by Mr. Wallace, and adopted by the Committee, and is being extensively circulated, in the hope of obtaining replies which will enable the Committee to form their report on authentic information; and I can only say that I shall be most happy to receive information on any of the points which any of the readers of the 'Annals' may have the kindness to forward to me or to the other members of the Committee.

“POINTS OF INQUIRY TO WHICH THE ATTENTION OF PERSONS  
RESIDENT IN EXTRA-EUROPEAN COUNTRIES IS ESPECIALLY  
REQUESTED.

“A.—*As to Domesticated Animals which are also indigenous to the  
Country.*

“1. Ascertain what animals indigenous to the country are domesticated in it.

“2. What external differences exist between the wild and domesticated races?

“3. Do the domesticated intermix with the wild animals?

“4. Can perfect domestication be produced in the wild individual?—if so, in what length of time, and through what means?

“5. Do the offspring of the domesticated animals in any case show a tendency to return to the wild state?

“6. Where perfect domestication only takes place in the second or future generations, state what particulars of the progress you can ascertain.

“B.—*As to Domesticated Animals which have been introduced  
from other Countries.*

“7. Give a list of the domesticated animals of this class in the country.

“8. Ascertain, if possible, the date when any of these were first introduced.

“9. State, in the case of each animal, whether fresh importations are still frequently or occasionally occurring.

“10. State what external differences exist between any of these animals and those of the same species in Europe.

“ 11. State what differences are observable in the nature of their food, in their habits, their longevity, and their fecundity.

“ 12. State if any, and what, peculiar diseases occur; or, if any diseases to which they are liable in Europe are absent.

“ 13. State if crosses between European and native races are *more* or *less* productive than when both parents are of native race; and state what differences are observable in the offspring in the two cases.

“ 14. Observe what changes occur when domesticated animals from other countries are first introduced; and do these changes occur in the individuals imported, or only in their offspring?

“ C.—*Special Inquiries relating to the more common Domestic Animals.*

“ 15. *Sheep*.—When sheep are introduced from another country, does the quality of the wool change in the individual or in the progeny? what time is required to effect the change? Is any difference perceptible in very young lambs? or at what age does it take place? are they covered with wool or hair? does the altitude of the station have any effect?

“ 16. *Horses*.—Do *introduced* or *native* races of horses breed most freely? are crosses between the two advantageous? do stripes or bands on the back, legs, shoulders, or faces of horses ever occur? and in all cases where such stripes occur, ascertain if the parentage is pure or mixed.

“ 17. *Cattle*.—Are there any truly native races of cattle in the country? do they breed freely with foreign cattle? are the hybrid offspring fertile, and capable of forming a hybrid race without any second cross with either of the parent stocks?

“ 18. *Dogs*.—When wild dogs occur, is there any evidence to show if they are truly indigenous species, or a race escaped from domestication? do they intermix with domesticated races? and are the offspring perfectly fertile?

“ 19. *Ducks and Geese*.—When an indigenous race of ducks or geese is domesticated in the country, experiments of great value on the phenomena of hybridity can be made. The point to be ascertained is whether the cross between a pure native and pure foreign breed produce offspring which are capable of propagating their kind for several generations without any further intermixture with either of the parent races. To carry out this experiment fairly, two persons should co-operate, each breeding a number of hybrids and then exchanging their males, so as to avoid breeding too closely in-and-in. This should be done at each successive generation, and the fertility and character of the offspring accurately noted. Persons with facilities for such experiments would confer a boon on natural science by carrying them out with as many different races as possible. The experiments need not be confined to ducks, though they offer many advantages, from the ease with which they may be everywhere obtained, and their greater propensity to cross than in the case of most other animals.’